Mentoring substructures and superstructures: an extension and reconceptualisation of the architecture for teacher mentoring

HOBSON, Andrew J and MAXWELL, Bronwen <http://orcid.org/0000-0002-8022-9213>

Author Accepted Manuscript, 12.09.2019: Hobson, A.J. & Maxwell, B. (2020) "Mentoring substructures and superstructures: an extension and reconceptualisation of the architecture for teacher mentoring. *Journal of Education for Teaching: International Research and Pedagogy*, 46(2).

Mentoring substructures and superstructures: an extension and reconceptualisation of the architecture for teacher mentoring

Andrew J Hobson (University of Brighton)
Bronwen Maxwell (Sheffield Hallam University)

Abstract

This paper arises out of an empirical investigation of the validity of Cunningham's (2007) thesis that the effectiveness of teacher mentoring is enhanced by a supportive institutional framework comprising eight 'architectural design features'. It draws upon analyses of data from a mixed methods study of mentoring in the English Further Education sector. Data were generated via 40 semi-structured interviews with teachers, mentors and other stakeholders, and a national online survey of teachers of all subjects/vocational areas, completed by 392 respondents across all nine regions of England. The paper presents a reconceptualisation of the architecture for mentoring which encompasses both a mentoring substructure and superstructure. Cunningham's institutional architecture (reconceptualised as a mentoring substructure) is extended through the identification of additional design features, while limitations of the concept of an institutional mentoring architecture are exposed and evidence presented to show that a complementary superstructure is a necessary additional means of seeking to achieve optimally effective mentoring. A new research agenda is proposed to explore the extent to which the proposed mentoring substructure and superstructure are applicable in different professional and international contexts, and to identify common features of optimally supportive mentoring superstructures.

Keywords: Teacher mentoring, Further Education, mentoring architecture, mentoring substructure, mentoring superstructure

1. Introduction

In a 2007 article published in this journal, Bryan Cunningham traced the (then) recent policy-induced expansion of mentoring in initial teacher education (ITE) in the English further education (FE) sector, noted the variable coverage and quality of such mentoring, and argued that the mentoring role would "not be optimally effective where a supportive institutional framework, or architecture, is lacking" (p.84). Cunningham then outlined eight broad 'design features' of a supportive institutional architecture for mentoring, relating to: (1) an institutional commitment to mentoring; (2) institutional ethos; (3) appropriate physical resources; (4) mentor induction, training and support; (5) mentor selection and accreditation; (6) clarity and consistency in mentoring roles; (7) subject specific support; and (8) evaluating the impact of mentoring. Cunningham's (2007) thesis has been widely cited in the intervening years yet, as he acknowledged at the time, it was not based on empirical data, nor has it been verified by empirical evidence since.

In this paper we offer a more comprehensive supportive framework for mentoring which would better facilitate optimally effective teacher mentoring in the English FE sector, and which is potentially applicable to mentoring in different phases of education (e.g. primary and secondary or K-12 schools) and other professional settings in wider international

contexts. We do so by drawing on a substantial empirical study of teacher mentoring in the English FE sector (Hobson et al. 2015) to:

1) examine the validity of Cunningham's (2007) thesis that the presence of eight architectural design features enhances, and their absence impedes, the effectiveness of teacher mentoring;
2) refine, extend and reconceptualise Cunningham's institutional architecture for mentoring as an *organisational mentoring substructure* incorporating additional design features which impact the effectiveness of teacher mentoring; and
3) expose limitations of the concept of an institutional architecture and propose a complementary *mentoring superstructure* as a necessary additional means of striving for optimally effective mentoring.

We should stress that we are not seeking to deny the importance of context in general – or, in the case of our empirical study, the FE context in particular – in shaping both mentoring relationships and support structures. However, our focus in this paper is on the identification of common features of a supportive mentoring infrastructure which are evident across diverse contexts.

In what follows we briefly explain our use of key terms and concepts central to our study, including 'mentoring', 'architecture' and 'further education'. We then provide an overview of the policy and research context for our study, before outlining the research design and presenting and discussing our findings to draw out an original extension and reconceptualisation of Cunningham's (2007) mentoring architecture.

First, it is important to acknowledge that there is no consensus about how mentoring should be construed in the English FE sector or more generally (Colley 2002; Tedder and Lawy 2009), and Cunningham did not offer a definition in his 2007 article. In this study, we conceptualise mentoring as

> a formal, one-to-one relationship, *usually* between a relatively inexperienced teacher (the mentee) and a relatively experienced one (the mentor), which is intended to support the mentee's (though may also support the mentor's) learning, development and well-being.

We say 'usually' because teachers may engage in peer mentoring relationships with teachers of similar levels of experience; and we acknowledge that, in some organisations, the intended aims of mentoring as set out in our definition may not be explicitly stated or commonly understood. Furthermore, whilst the focus of this paper is mentoring as a formal, one-to-one relationship, we recognise that informal mentoring (Tong and Kram 2013) and 'group mentoring' (Mitchell 1999) can also have positive impacts on teachers' learning, development and well-being.

Secondly, while Cunningham (2007) did not provide an explicit definition of architecture, his use of architecture as a "supportive institutional framework" for mentoring (84) appears consistent with the English Oxford Living Dictionaries definition: "The complex or carefully designed structure of something". Nonetheless, we prefer the term 'organisational architecture' to Cunningham's 'institutional architecture', to reflect the diverse range of FE providers in the sector, and we posit that an optimally supportive mentoring framework may

include elements which lay outside of the organisation whilst interacting with the organisational architecture.

Thirdly, the FE sector in England (sometimes referred to as the Post-16 sector, Lifelong Learning Sector, or Post-Compulsory Education and Training) is extremely diverse, including FE colleges, sixth form colleges, adult and community learning providers, prisons, work-based learning providers, and private training companies (Lingfield, 2012). Such diversity makes the FE sector a particularly apposite context in which to seek to identify common features of a supportive mentoring infrastructure that might have wider applicability. Whilst Cunningham's (2007) thesis focused on mentoring in ITE and in FE colleges in particular, our empirical study spans teacher mentoring across all career stages and a wider range of FE providers. Finally, we use the term 'teacher', in this paper, to cover a wide range of job titles in the FE sector, including tutor, lecturer and trainer, and use 'trainee' to refer to anyone undertaking a pre-service or (more common in English FE) in-service ITE programme.

2. Policy and research context

In common with other education phases in England and other international educational systems that are underpinned by neo-liberal ideologies, the English FE sector has over the last two decades been subject to increasing levels of accountability and surveillance, and performative and managerialist cultures have become pervasive (Orr 2012; Smith and O'Leary 2013). All are features of what Sahlberg (2010) has termed the global education reform movement (GERM). However, the pace and intensity of FE reform has been particularly marked (Norris and Adam 2017) and the sector, which traditionally has not had the status or support within policy-making of either schools or higher education, has also been acutely negatively impacted in national policy responses to austerity (O'Leary and Rami 2017).

The impetus for the introduction and expansion of formal teacher mentoring in the English FE sector came with the commencement of pilot inspections of ITE provision in 2003 by the Office for Standards in Education (Ofsted), which inspects and regulates providers of education and skills for learners of all ages in England on behalf of the UK government. As a result of these inspections, Ofsted concluded that "teacher training does not provide a satisfactory foundation of professional development for FE teachers at the start of their careers" (Ofsted 2003, 2), and identified "a lack of systematic mentoring and support in the workplace" (ibid, 18) as a particular impediment to this. The following year, the (then) Department for Education and Skills (DfES) report '*Equipping our teachers for the future*' stated that "Mentoring, either by line managers, subject experts or experienced teachers in related curriculum areas, is essential" (DfES 2004, para 3.6), and subsequent inspection of ITE provision (Ofsted 2004) across the sector has included assessment of the extent to which trainees are effectively supported by mentors.

Cunningham (2007) highlighted the expanded yet variable coverage and quality of mentoring in FE ITE, and argued that institutional leadership teams must establish what he termed a supportive mentoring architecture if they are to maximise the effectiveness of their mentoring provision. As previously noted, Cunningham's mentoring architecture comprised eight broad design features, which, together with their sub-features, are summarised in Figure 1.

Figure 1: Architecture for teacher mentoring (Cunningham, 2007)

Design Features
Sub-features
1) **An institutional commitment to mentoring** • The work of mentors is recognised and rewarded – e.g. through promotion criteria • Mentors and mentees receive remission from teaching to engage with mentoring • Sympathetic timetabling facilitates mentor-mentee meetings • Sufficient resources are devoted to supporting mentoring (see 3 below)
2) **An appropriate institutional ethos** • Promotion of collegial environment to encourage reciprocity of mentoring relationships • Demonstrable commitment to supporting professional learning • Mentoring is integrated with institution's overall mission and policies – e.g. induction, staff development
3) **The physical resources for mentoring** • Suitable meeting room for confidential mentoring conversations • ICT support to facilitate remote mentoring and networking between mentors • Other resources such as relevant texts, journals, recording equipment
4) **Mentor induction, training and support** • Effective processes for induction, training and ongoing development and support for mentors • Potential designation of 'coordinating mentor' or 'senior mentor' to provide or oversee induction, training and support, and undertake other functions
5) **The selection and accreditation of mentors** • Appropriate selection criteria are deployed • Potential benefits of mentoring for mentors are highlighted to aid recruitment • There are opportunities to gain accreditation for mentoring 'as a high level work-based professional activity' (Cunningham, 2007, p. 92)
6) **Clarity and consistency regarding mentoring roles** • Clear specification of roles, responsibilities and entitlements of mentors and mentees, including requirements regarding minimum levels of contact and support • A mentoring contract to embody roles and responsibilities and establish shared ownership and ground rules
7) **Subject specificity** • Mentees are provided with same-subject specialist mentors where possible, or those from cognate disciplinary backgrounds
8) **Evaluating the impact of mentoring** • Evaluation of mentoring provision to inform ongoing development and improvement.

Whilst, to date, the plausibility of Cunningham's (2007) mentoring architecture has not been evaluated, several later studies have reported continued variability in the quality of mentoring support in the English FE sector (notably in the context of ITE), and identified a number of factors which help to explain this, most (but not all) of which relate to deficiencies in architectural design features proposed by Cunningham. In doing so, these studies provide implicit support for the validity of those design features (DFs) as ingredients of effective teacher mentoring in the sector. Although this evidence base is limited by the relatively small number of studies conducted and the fact that most such studies are small-scale and/or restricted to investigating mentoring provision associated with single ITE providers (Duckworth and Maxwell 2015), it is important to acknowledge a number of common research findings, which we briefly summarise below.

First, there is evidence that teacher mentoring is often constrained by a lack of organisational commitment to mentoring (DF1). For example, Cullimore and Simmons (2010) found evidence of mentors having insufficient time to carry out their role, unsympathetic timetabling and, more generally, mentors receiving "insufficient support and recognition from college management" (236). Related to this, and secondly, there is some evidence that effective mentoring has been hampered by a lack of physical resources for mentoring (DF3). Cullimore and Simmons (2010) reported, for example, that mentors commonly referred to "infrastructure problems such as finding a suitable and private place to meet" (236). Thirdly, research suggests that mentoring is impeded by insufficiently effective processes for induction, training and support for mentors (DF4), with evidence that some mentors are not trained and others receive inadequate preparation for the role (Eliahoo 2009; Ingleby and Hunt 2008; Thompson 2016). Fourthly, some research supports the contention that there should be a clear specification of the roles, responsibilities and entitlements of mentors and mentees (DF 6). Notably, Lawy and Tedder (2011) found that there was "a lack of clarity about the purpose and role of mentoring" (387), resulting in some mentor-mentee pairs operating with conflicting understandings of mentoring.

The mentoring in FE research thus provides some support for the validity of at least four of Cunningham's (2007) eight architectural design features (DFs1,3,4,6). There is also partial support for the validity of DF5 insofar as some studies have suggested that the variable quality of mentoring is partly explained by insufficiently rigorous processes of mentor selection (e.g. Eliahoo 2009), though there is insufficient evidence, to date, to support (or refute) the validity of the second component of DF5, the need for mentor accreditation. There is also little evidence to support (or refute) the validity of DF2 (institutional ethos), as described by Cunningham (2007), or DF8 (evaluating the impact of mentoring). In addition, some literature questions whether the focus on subject-specificity (DF7) is as vital as Cunningham (and Ofsted) suggest, given the complex, 'connective' and student-centred roles that FE teachers need to undertake to prepare their students for workplaces of the future (Fisher and Webb 2006; Lucas 2007).

Furthermore, some research indicates that other potentially important architectural design features or sub-features may be absent from Cunningham's analysis. In particular, several studies (e.g. Cullimore and Simmons 2010; Ingleby 2014; Tedder and Lawy 2009) suggest that the effectiveness of teacher mentoring in FE ITE is constrained where mentors are required to assess and evaluate the work of the mentees they are seeking to support. Tedder and Lawy (2009) found that the summative, judgemental requirements of mentoring in the English FE sector impeded the development of trust between mentor and mentee, thus restricting "opportunities for open and frank discussion" (427) and diminishing the transformative potential of mentoring. Finally, Cullimore and Simmons (2010) argued that one of the impediments to effective mentoring in FE ITE was that it was not clear to whom mentors were accountable, if anyone.

3. Methodology

This paper extends the evidence base summarised above and offers an extension and reconceptualisation of Cunningham's (2007) architecture for teacher mentoring via a re-analysis of data generated for a mixed methods study of teacher mentoring in the English FE sector, which was conducted in 2014-15. The main aims of the original study were:

1. to investigate the reach, strengths and limitations of teacher mentoring in the sector, with a particular but not exclusive focus on teachers of STEM (science, technology, engineering and mathematics) subjects;
2. to identify factors which facilitate or impede effective mentoring, and factors which potentially overcome impediments identified.

To investigate these aims, a concurrent equal status mixed methods design (Tashakkori and Teddlie 1998) was deployed. This comprised an initial review of literature, which informed semi-structured interviews with teachers, mentors and other stakeholders, and an online national survey of teachers of all subjects/vocational areas across the FE sector. We summarise the processes followed below, with further information provided in our full research report (Hobson et al. 2015).

3.1. Review of literature

A systematic key word search of the British Education Index, the Australian Education Index and the USA Education Resources Information Center (ERIC) was undertaken, together with Google Scholar and Google key word searches to identify relevant academic, professional and policy literature. Where appropriate, sources cited in the documents retrieved from the searches were followed up and key websites also searched. To update the original literature review and inform the specific focus of this paper, we identified and reviewed all research outputs which had cited Cunningham's (2007) mentoring architecture article, which at that time (July 2018) had amassed 14 CrossRef citations and 36 Google Scholar citations.

3.2. Interviews with FE teachers and other stakeholders

A snowball sampling technique was initiated, via a range of national and regional networks relevant to the sector, which led to the recruitment of 40 interview participants, drawn from 19 different organisations across England. The sample comprised eight early career teacher mentees (including trainee, newly qualified or second year teachers), four relatively experienced teacher mentees, eight mentors of early career and/or experienced teachers, and a further 20 stakeholders. These stakeholders included: heads and assistant heads of departments or faculty, or equivalent in training providers; senior leaders in FE; FE- and HEI-based teacher educators; and senior colleagues with experience of leading mentoring programmes in FE. All mentees, mentors and heads or assistant heads of department/faculty or equivalent had STEM specialisms, while other stakeholders had wider knowledge and experience of mentoring across all subject/vocational areas in their organisations and/or the sector.

The semi-structured interviews were recorded and transcribed, with participants' permission. Following the conventions of a general inductive analysis (Thomas 2006) and informed by our literature review, an initial coding frame was developed from the first 15 interviews, using MAXQDA10 qualitative data analysis software, and agreed by both authors. All transcripts were subsequently coded, with refinements made to the coding frame through an iterative process to take account of emergent findings which had not been identified through the initial inductive analysis.

3.3. Online teacher survey

A national online teacher survey was developed and was also distributed using snowball sampling via a range of regional and national networks. A total of 392 usable responses was received, from respondents at career stages ranging from trainee to long-serving and highly

experienced teachers, across all nine regions of England. Around two-thirds (65%) of respondents were female and 35% male, and respondents taught across a wide range of subject/vocational areas. Just under three fifths (59%) of respondents were from FE colleges, with 29% from Sixth-Form Colleges. A small proportion of respondents were from adult and community learning providers (5%) and employment and learning providers (1%).

Uni-variate and bi-variate analyses of survey data were undertaken using SPSS statistical software. Chi-square tests of association were used, as well as Cramer's V tests to provide an indication of the strength of association between variables.

3.4. Subsequent data analysis

For this paper we conducted a thematic re-analysis of all coded segments from our earlier analysis of interview data and all outcomes of our quantitative analyses of survey data which had identified factors potentially enhancing or impeding the effectiveness of mentoring, in relation to the eight design features and associated sub-features of Cunningham's (2007) mentoring architecture. Evidence of any factors influencing mentoring effectiveness that could not be assigned to one of Cunningham's eight design features or associated sub-features, was allocated to an 'other' category, from which further themes (and, potentially, design features and sub-features) were subsequently developed and agreed. Coding of interview data was reviewed by both authors with an initial inter-rater reliability of 96.5%. All discrepancies in coding were reviewed and, following discussion, allocated to what was considered to be the most appropriate node.

3.5. Research ethics

The study was granted ethical approval by the University of Brighton, and conducted in accordance with the ethical guidelines of the British Educational Research Association (BERA 2011).

3.6. Limitations

Inevitably, there are several limitations of this study. These include constraints on the generalisability of findings as the survey sample was not random and may not be representative of all teachers in the sector. In particular, there was a relatively small number of respondents from adult and community learning providers and employment and learning providers, although employment and learning providers were appropriately represented in the interview data. Hence, where p-values are provided in presenting findings of our survey analyses, these should be taken to indicate the presence or absence of statistical significance within our sample and not within the English FE teacher population as a whole.

A second limitation of our study was that, in the qualitative interviews, there was a bias towards STEM teachers and mentors, although some interviewees had a broader knowledge of mentoring provision across their organisations, partnerships and in some cases the wider sector. Thirdly, the concurrent nature of the mixed methods design, a consequence of the project timeline agreed with the sponsor, meant the lack of opportunity to use survey findings to inform interview questions or vice-versa.

Despite its limitations, the research represents one of the most substantial studies of teacher mentoring in the English (or any country's) FE sector to date.

4. Findings

In what follows, we present evidence which: firstly, provides support for a number of Cunningham's architectural design features; secondly, suggests important additional design features or sub-features which are not present in Cunningham's (2007) mentoring architecture; and thirdly, shows that attempting to establish a supportive organisational architecture is a necessary but insufficient condition for optimising the effectiveness of teacher mentoring.

4.1. Support for Cunningham's (2007) architectural design features

Our analyses provide clear support for the validity of four of Cunningham's eight architectural design features, DFs 1, 4, 6 and 7, and partial support for DFs 2 and 5, as we illustrate below.

4.1.1. An institutional commitment to mentoring (DF1)

The importance of an organisational commitment to mentoring was widely recognised by interviewees. Consistent with Cunningham's thesis, it was generally considered that commitment is demonstrated where the work of mentors is recognised, valued and rewarded, and, in particular, where mentors are provided with remission from teaching to undertake the mentoring role, and mentors and mentees are timetabled to meet during the working week:

> It devalues the process I think if it's not seen as being recognised and important enough by the institution that just one hour a week can be given up for it. (Mentor 4, Sixth Form College)

In the absence of these architectural design sub-features, some colleagues were reluctant to take on the mentor role, while some of those who did found it difficult to devote sufficient time to mentoring, which is significant given evidence that a minimum level of support for mentees is required (see DF6, below).

4.1.2. Institutional ethos (DF2)

Some interview participants identified *an appropriate organisational ethos* (DF2) as a factor influencing the effectiveness of mentoring schemes in the sector, with one stating

> I think the culture's got to be right inside a company or mentoring won't work. If the culture's not right it will be a struggle. (Experienced teacher mentee 1, Employment and learning provider)

Whilst only a minority of interview participants explicitly identified organisational ethos or culture, it can be argued that some of the factors previously attributed to DF1, such as reward and recognition for mentors, are also indicators of DF2, although they are not identified as such by Cunningham (2007). Further evidence relating to the potential importance of organisational ethos is also discussed in Section 4.2.3 ('Alternative approaches to mentoring') below.

4.1.3. Mentor induction, training and support (DF4)

Our interview data also corroborate the importance of effective mentor induction, training and support. Participants emphasised that experienced teachers did not necessarily have the skillset required for mentoring, and stressed the importance of initial mentor training, and ongoing opportunities for professional learning and development (PLD):

> We put on [mentor training] workshops and those that do attend … find that very supportive … what they appreciate is getting to discuss mentoring with other mentors. And we look at things like problematic situations and how to deal with those. So those workshops are very well evaluated… (Stakeholder 10, University teacher educator)

Some participants noted that the provision of effective mentor training tends to require that the mentor trainers themselves have undertaken appropriate education, training and development opportunities.

4.1.4. The selection (and accreditation) of mentors (DF5)
In relation to the first of the two components of Cunningham's fifth design feature, there was a general consensus amongst interviewees regarding the importance of rigorous methods of mentor selection. Several participants attributed perceived variability in the quality of mentoring to the absence of such methods, with many mentors said to be assuming the role '*by default*' (Stakeholder 9, University teacher educator; and Mentor 5, Sixth Form College) and, therefore, having varying degrees of commitment to the role:

> The question is whether they [mentors] have a choice to be a mentor or not and many mentors do not. A bonus [for uncommitted mentors] is that they can have a trainee teacher to cover lessons whilst they get on with admin[istrative] duties. This can lead to the trainee teacher being deserted. (Stakeholder 15, University teacher educator)

However, there is insufficient evidence in our data to ascertain whether the second component of Cunningham's fifth design feature, accrediting or certificating mentors, adds significant value to the mentoring process, over and above the provision of effective mentor training and development.

4.1.5. Clarity and consistency regarding mentoring roles (DF6)
Interview participants suggested that another key factor enhancing or impeding the effectiveness of teacher mentoring is the presence or absence of an explicit account of the roles, responsibilities and entitlements of both mentors and mentees.

> [O]ccasionally we have a trainee who… expects their mentor to kind of almost baby-sit them… [A]ctually it is not [the mentor's] role to do everything for [them]… There is a role and this is about supporting your development. So I think sometimes it's about matching of expectations: what the mentors think their role is and their expectations and what the trainees expect from their mentors. (Stakeholder 9, University teacher educator)

The survey findings presented in Table 1 also provide support for and extend Cunningham's DF6 sub-feature regarding specifying minimum levels of mentor contact with and support for mentees. While Cunningham did not suggest what such a minimum might entail, and suggested that some flexibility be maintained, our analyses show that, in relation to a number of potential benefits of mentoring, mentees who saw their mentors approximately once a fortnight or more frequently were more likely to report that mentoring was very or quite beneficial than mentees who saw their mentors approximately once a month or less, with variation by frequency of contact reaching statistical significance on six out of the nine items.

Table 1. To what extent is/was the mentoring* beneficial by how often the respondent saw the mentor

	Very/quite beneficial					
	Once every 2 to 3 days/daily (n range=15 to 17)	Approximately once a week (n range = 21 to 25)	Approximately once a fortnight (n range =13 to 14)	Approximately once a month (n range = 27 to 30)	Less than once a month (n range = 33 to 38)	Statistical significance
Helping you to develop your subject/vocational knowledge	88%	77%	85%	64%	30%	p<0.01 (CV=0.46)†
Helping you to develop your subject/vocational pedagogy (how to teach your subject(s)/ vocational area(s))	100%	75%	100%	62%	56%	Not statistically significant (NS)
Helping you to develop general pedagogical techniques including assessment strategies	94%	74%	93%	72%	47%	p<0.01 (CV=0.38)
Helping you to develop your approach to lesson planning	88%	77%	86%	80%	42%	p<0.01 (CV=0.41)
Facilitating access to or help with teaching resources or equipment	94%	81%	86%	59%	43%	p<0.01 (CV=0.41)
Helping you to develop your skills of critical reflection e.g. on your own practice	75%	78%	93%	77%	59%	NS
Supporting your emotional wellbeing	94%	88%	100%	82%	36%	NS
Supporting your career progression	87%	59%	93%	67%	40%	p<0.01 (CV=0.39)
Enabling you to talk about any difficulties you are/were experiencing within your organisation	100%	100%	100%	87%	61%	p<0.01 (CV=0.46)

* In all survey questions we used the terminology mentoring/coaching because the terms are often used interchangeably in the sector. (We conceptualise coaching as one of a range of developmental activities which mentors may adopt to empower mentees and support their professional learning, development and wellbeing – so when we refer to 'mentoring' this encompasses, or may encompass, coaching.)

† Cramer's V values determine the strength of association or dependency between two categorical variables after significance has been ascertained using chi-square tests. Cramer's V has a value between 0 and 1: values close to 0 show negligible association, values close to 1 show very strong association.0.20 to under 0.40 is a moderate association and 0.40 to under 0.60 is a relatively strong association (Rea and Parker, 1992 p203).

4.1.6. Subject specificity (DF7)

Whilst, as we noted earlier, some studies (e.g. Fisher and Webb 2006) have implicitly questioned the importance of mentees being provided with same-subject/vocational area specialist mentors, the clear consensus amongst our interviewees was that same subject/ vocational specialists were able to add significant value to the mentoring process through being able to support a wider range of PLD needs than non-specialists:

> Some [mentees] … haven't got subject related mentors and a downside to that ... is they wouldn't be able to help in the subject specific stuff, whereas my mentor because he teaches the same subjects as I do he can actually go 'Have you thought about doing it like this? This is how I teach this bit…' So I think that a subject related mentor is a good thing… it's nice to have a mentor that can give a little bit of feedback on the subject matter as well. (Early career teacher mentee 8, FE College)

Furthermore, mentees who responded to our survey were generally (and, in most cases, statistically significantly) more likely to report that the support of mentors was beneficial where mentors shared the same subject/vocational specialism as themselves, as shown in Table 2.

Table 2. To what extent is/was the mentoring beneficial by whether mentor works in the same subject/vocational area

	Very/quite beneficial		
	Does not work in the same subject/ vocational area as you? (n range = 27 to 32)	Someone who works in the same subject/ vocational area as you? (n range = 65 to 71)	Statistical significance
Helping you to develop your subject/vocational knowledge	11%	84%	p<0.01 (CV = 0.68)
Helping you to develop your subject/vocational pedagogy (how to teach your subject(s)/vocational area(s))	47%	87%	p<0.01 (CV =0.43)
Helping you to develop general pedagogical techniques including assessment strategies	57%	80%	p<0.01 (CV =0.24)
Helping you to develop your approach to lesson planning	58%	76%	NS
Facilitating access to or help with teaching resources or equipment	33%	80%	p<0.01 (CV =0.46)
Helping you to develop your skills of critical reflection e.g. on your own practice	79%	78%	NS
Supporting your emotional wellbeing	57%	87%	p<0.01 (CV =0.34)
Supporting your career progression	52%	69%	NS
Enabling you to talk about any difficulties you are/were experiencing within your organisation	75%	91%	P<0.05 (CV =0.22)

4.1.7. Other design features

Turning to Cunningham's remaining architectural design features, there is insufficient evidence in our data to support or refute the importance of *physical resources for mentoring* (DF3) or *evaluating the impact of mentoring* (DF 8), in striving for optimally effective mentoring.

4.2. Additional architectural design features

4.2.1. Effective pairing of mentees and mentors

Apart from subject specificity (DF7), Cunningham (2007) said little about the pairing of mentees with mentors. Our analyses suggest that a number of additional factors can increase

the likelihood of achieving successful pairings. First, it is vital that mentors have credibility with mentees and are seen to have relevant knowledge and experience beyond that relating to subject or vocational specialism:

> [T]he mentor predominantly teaches Level 1 and he's very good at it [but] we'll get some Level 3 / Level 4 teachers saying 'Well, why do I need to be mentored by somebody that's teaching at Level 1?' I know that's an issue even though the [mentoring] process is the same. (Stakeholder 17, Assistant Head of Department, FE College)

> My feeling is that they chose a good match for me in terms of a mentor… my PGCE supervisor … matched me with somebody who had previously worked somewhere else and come into teaching later on so… sort of understood some of that transitional stuff that I've been trying to work through. (Early career teacher mentee 1, FE College)

Secondly, our analyses suggest that while in some cases teachers are able to forge effective mentoring relationships with their line managers, and in some cases the line manager is the only available subject or vocational specialist mentor within the organisation, mentoring was generally perceived to be more effective where mentees were *not* paired with their line managers:

> [Mentors] are probably giving you a shoulder to cry on as much as anything… It's quite difficult to take some of those things to your head of department when actually you just want to have a bit of a sounding off about something in a way where it's treated in confidence. (Early career teacher mentee 1, FE College)

Thirdly, and especially pertinent where the only available subject or vocational specialist within a mentee's organisation is their line manager, our evidence suggests there are potential benefits of pairing teachers with *external* mentors. Almost half (48%) of the teachers responding to our survey stated that they might benefit from the support of a mentor external to their organisation: of whom 56% indicated they would welcome additional support to develop their subject/vocational area pedagogy, 54% would welcome additional support to develop their subject/vocational knowledge, and 50% would welcome an independent perspective on some issues. Similarly, our interview data revealed that some teachers felt more able to seek support for their PLD needs from external rather than internal mentors:

> [T]o an external mentor you can say more things like "I'm desperate." There's something about being at work which means you have to consume a bit of your own smoke otherwise you look like you're just rocking the boat and that's not good. (Early career teacher mentee 3, FE College)

Fourthly, our analyses suggest that mentoring tends to be more effective where mentees have an element of choice in the selection of their mentor. Table 3 shows that, in relation to all potential benefits of mentoring listed, higher percentages of teachers who were able to select their mentor (from a group of staff identified by the organisation) than those whose mentors were allocated by their organisation reported that mentoring was very or quite beneficial, although the relatively small number of teachers who actually had the opportunity to select

their own mentor rendered statistically significant findings unlikely on this series of questions.

Table 3. To what extent is/was the mentoring beneficial by how the mentor was allocated

	Very/quite beneficial			
	Someone allocated formally to you by your institution (n range =75 to 83)	Someone you selected for yourself on an informal basis (n range =21 to 25)	Someone you selected for yourself from a group of staff identified by the institution? (n range = 13 to 14)	Statistical significance
Helping you to develop your subject/vocational knowledge	59%	58%	93%	$p<0.05$ (CV=0.23)
Helping you to develop your subject/vocational pedagogy (how to teach your subject(s)/vocational area(s))	69%	71%	100%	NS
Helping you to develop general pedagogical techniques including assessment strategies	69%	63%	79%	NS
Helping you to develop your approach to lesson planning	65%	67%	86%	NS
Facilitating access to or help with teaching resources or equipment	63%	57%	86%	NS
Helping you to develop your skills of critical reflection e.g. on your own practice	69%	87%	79%	NS
Supporting your emotional wellbeing	67%	83%	93%	NS
Supporting your career progression	52%	76%	86%	$p<0.05$ (CV=0.27)
Enabling you to talk about any difficulties you are/were experiencing within your organisation	78%	96%	100%	NS

4.2.2. The duration of mentoring relationships

Turning to another consideration that does not feature in Cunningham's (2007) mentoring architecture and is not addressed in the wider research literature on mentoring in the FE sector, our analyses found that the *duration* of mentoring relationships also impacts perceived mentoring effectiveness. Data presented in Table 4 show that higher percentages of teachers who had been in a mentoring relationship for over 6 months or, to a greater extent, over a year, tended to report that they had found mentoring beneficial, compared with teachers whose mentoring relationships had lasted less than 6 months. The findings were statistically significant in relation to supporting the development of subject/vocational knowledge, emotional well-being and career progression.

Table 4. To what extent is/was the mentoring beneficial by length of time for mentoring

	Very/quite beneficial			
	Less than 6 months (n range = 18 to 23)	Between 6 months and 1 year (n range =33 to 34)	Over a year (n range = 55 to 60)	Statistical significance
Helping you to develop your subject/vocational knowledge	42%	71%	73%	$p<0.05$ (CV=0.24)
Helping you to develop your subject/vocational pedagogy (how to teach your subject(s)/vocational area(s))	57%	77%	79%	NS
Helping you to develop general pedagogical techniques including assessment strategies	68%	73%	74%	NS
Helping you to develop your approach to lesson planning	67%	77%	68%	NS
Facilitating access to or help with teaching resources or equipment	44%	68%	72%	NS
Helping you to develop your skills of critical reflection e.g. on your own practice	76%	67%	79%	NS
Supporting your emotional wellbeing	59%	70%	86%	$p<0.05$ (CV=0.26)
Supporting your career progression	37%	64%	75%	$p<0.05$ (CV=0.29)
Enabling you to talk about any difficulties you are/were experiencing within your organisation	78%	85%	93%	NS

4.2.3. Alternative approaches to mentoring

While Cunningham's (2007) mentoring architecture stresses the importance of clarity and consistency in relation to mentoring roles, it makes no suggestion that mentoring may be more effective where organisations support some approaches to mentoring rather than others. Our analyses show that where mentoring is deployed as, or perceived to be, a remedial strategy to address the perceived under-performance of teachers, it can attract a stigma which renders some mentees reluctant to seek support from their mentors, and can thus impede their PLD and well-being:

> I remember this woman recounting a story of going into the staffroom… to work with someone and people there going "Oh, have they come to pick me?" because… it's [perceived to be] a bad thing, you know, it means you're doing something wrong if you're working with a mentor… (Stakeholder 6, Head of teacher education, FE College)

This corroborates earlier evidence on the importance of institutional or organisational ethos (DF2), suggesting that teachers are more likely to engage productively with mentors and their PLD where their organisation supports a professional growth-oriented approach to mentoring (Boyatzis, Smith, and Beveridge 2013), consistent with an expansive learning culture (Fuller

and Unwin, 2003), rather than a deficit approach to mentoring and PLD, associated with surveillance, assessment and punitive action.

4.2.4. Cultivating appropriate mentee mindsets

Our analyses suggest that another factor influencing the effectiveness of teacher mentoring is whether mentees have mindsets conducive to engaging productively with mentoring support. That is, some mentees are naturally more willing than others to seek the support of a mentor and openly share their PLD needs, though we have seen that this can be influenced by other considerations including organisational ethos, the mentoring approach deployed within an organisation or by a particular mentor, and whether mentors are internal or external to the organisation.

> [S]ome [teachers] have been less easy to work with because their mindset was less adaptable… that's the biggest, single difficulty. If you've got something to work with you can do an awful lot… Of the three people that I have in mind [name of teacher] has been the one who has been most likely to say "I think I would benefit from this" ... whereas the others, who were quite self-contained, it wasn't in their nature to discuss what their needs were, so that was quite hard… (Mentor 7, FE College)

These considerations, together with the earlier finding about the importance of managing mentees' expectations and ensuring clarity and consistency of understanding of mentoring roles, suggest that an additional feature of a supportive mentoring architecture is the provision of training for *mentees* in how to develop a productive mentoring mindset (Searby 2014) and take full advantage of mentoring support.

4.2.5. Ensuring accountability for mentoring

Extending the findings of Cullimore and Simmons (2010), our analyses also suggest that mentoring may be more effective where mechanisms are in place to hold mentors and mentees accountable for their participation in mentoring, so that ineffectual mentoring can be identified and addressed:

> I have to watch some mentors like a hawk because they don't really do what they're supposed to do and others are absolutely outstanding… It's total reliance on the integrity of both parties. There are no sanctions if you don't do anything… (Stakeholder 1, Teacher Educator and Head of Department, FE College)

4.3. Beyond organisational architectures

Our analyses reveal that the extent to which organisations are able to establish a supportive architecture for teacher mentoring and, more generally, to optimise the effectiveness of teacher mentoring, is influenced by a number of factors external to and beyond the control of the organisation. Given that some architectural design features require significant resource, notably in terms of staff time, one such factor is the availability of funding for the professional development of staff that organisational leadership teams have at their disposal, which is related to the availability of funding for the sector more broadly. Our data suggest that some senior leadership teams take mentoring seriously and wish to implement a supportive architecture for mentoring but, in austere times, are unable to resource this within their organisations:

> [O]ur Director of HE brings in very senior managers … and I … bang on about mentoring. It's not that they don't consider mentoring to be important. It is because there is too much change and there is too little funding. (Stakeholder 7, University teacher educator, mentor trainer and mentoring researcher)

A second external consideration is the extent to which a wider support structure for mentoring exists, which emphasises the value and importance of mentoring, encourages organisations and individual teachers to take mentoring seriously, and provides appropriate guidance, resources and opportunities for training and development to help ensure that mentoring is as effective as possible. Our analyses suggest that the absence of such a support structure is an impediment to the achievement of consistently effective mentoring practice:

> I would say [mentoring] is for the most part effective to some extent. I think it suffers from being very *ad hoc* and not very well structured within the sector. (Stakeholder 10, University teacher educator)

When asked what could be done to improve mentoring in the sector, some participants thus called for mentoring to be appropriately recognised and regulated by an appropriate body or for the establishment of a national framework for mentoring and/or mentor development:

> [What is required is] more structure and [to be] more professional body led… more highly regulated so that [mentoring is] recognised as something that [is] vital. (Stakeholder 10, University teacher educator)

> [T]he concept of having some kind of agreed development programme… [and] recognition of the [mentor] role… at the national level would actually be a very strong message… [W]e'd be mobilising resources together rather than lots of people doing lots of different things across different education partnerships with varied levels of success… A programme… with some kind of national profile with … a quality assurance badge so that people who've done that mentoring programme would automatically gain some recognition… I think people's line managers, principals of colleges and executive teams in colleges would pay more attention to it. (Stakeholder 8, Teacher educator, FE College)

Thirdly, we noted in Section 4.1 that aspects of the organisational architecture and ethos, such as whether a growth-oriented or deficit approach to PLD is followed and experienced, positively or negatively impacts teachers' willingness and ability to openly engage with mentors, resulting in some teachers feeling the need to "consume some of their own smoke", as one interviewee put it. Yet organisational ethos often reflects and is, to varying degrees, shaped by external processes and pressures, such as: the austerity measures and rapid pace of reforms impacting the English FE sector ("too much change and …. too little funding", as Stakeholder 7 put it); specific accountability demands from inspection bodies such as the UK inspectorate, Ofsted; and, at the current time, the wider national, international and global accountability and surveillance orthodoxy. For example, as one teacher and mentor explained:

> Our team meetings are all about "Is the system clean? Are the registers right? Are they on the right course?" It's statistically driven. We're teaching to test which

> secondary is accused of because… well, the OFSTED criteria is "Are you excellent, good or average or bad?" (Mentor 3, FE College)

Whilst such external pressures and policy directives are inevitably 'refracted' (reinterpreted and redirected) in different ways at local levels by organisational leadership teams and individual teachers) (Goodson and Rudd 2012), our analyses suggest that it would be easier to establish supportive organisational architectures for mentoring which encourage open, trusting relationships between mentors and mentees where the external environment emphasises professional growth and support for professional learning rather than accountability, surveillance and punitive action against underperforming teachers. The point is illustrated in the following comment from a senior FE colleague:

> So my experience of [mentoring] was that at its worst it was confused with a lesson observation scheme and the resource was then focused on people who were getting [Ofsted] grade fours or grade threes in lesson observations and about getting them up from a three. (Stakeholder 6, Head of teacher education, FE College)

5. Discussion: reconceptualising the architecture for teacher mentoring

Our findings refine and extend the design features of an institutional architecture for teacher mentoring proposed by Cunningham (2007), and demonstrate the need to extend the conceptualisation of architecture beyond an organisational focus to incorporate the wider context in which mentoring operates. We discuss each of these aspects in turn, referring to the architectural features associated with effective mentoring within organisations as the *mentoring substructure* and features within the wider context as the *mentoring superstructure*.

5.1. Refining an architectural substructure for mentoring

Our findings, which largely align with yet extend those of previous studies in the field, show that a supportive organisational architecture or mentoring substructure in the English FE sector would include, at a minimum, the following key design features:

1. An organisational commitment to mentoring;
2. Clarity and consistency regarding mentoring roles;
3. Rigorous methods of mentor selection;
4. Effective methods of mentor-mentee *pairing*, to ensure that, where possible, mentees are allocated suitable, same subject or vocational-specialist mentors, and have an element of choice in the selection of their mentor;
5. Appropriate mentor training and networking opportunities;
6. *Mentee* training to help them cultivate productive mentee mindsets (Searby 2014);
7. Mentoring relationships of sufficient duration (normally one year or more); and
8. Means of ensuring that participants in mentoring schemes are accountable for this aspect of their work.

Furthermore, our findings suggest that it is not sufficient to ensure clarity and consistency in relation to mentoring roles since, however clear and consistent such roles may be, some approaches to mentoring are likely to be more productive than others in supporting mentees' PLD and well-being. Hence, in elaborating upon his argument that mentoring schemes needn't be restricted to the new entrants to teaching upon whom he was focusing, Cunningham (2007) suggested that mentors might be used as "*part of a departmental or*

institutional strategy to support underperforming teachers" (85), but our analyses show that deploying mentors in this way can stigmatise mentoring and impede its developmental potential by discouraging mentees from engaging and openly sharing their perceived PLD needs with mentors.

We should note that there is a high degree of overlap between the key features of a supportive mentoring substructure outlined above, key ingredients of effective teacher and leadership mentoring programmes in other education sectors and contexts (Hobson 2017; Searby and Brondyk 2016) and conditions for effective mentoring identified by studies of organisational mentoring programmes more generally and across international contexts (Hobson et al. 2016).

There is little evidence in the present study or in the wider teacher mentoring in FE literature to support the importance of three of Cunningham's (2007) architectural design features or sub-features: physical resources for mentoring, the accreditation of mentors, and evaluating the impact of mentoring. Our analyses were also inconclusive on the question of whether mentoring tends to be more effective where mentors are not required to formally assess mentees, as has been suggested by earlier research on teacher mentoring in both the FE and school sectors (e.g. Hobson and Malderez 2013; Tedder and Lawy 2009), and studies of mentoring in other professional contexts internationally (Hobson et al. 2016). We also note Cunningham's (2007) lack of reference to, and the lack of evidence in our own and other studies in the FE sector on, the importance of an organisational mentoring coordinator role, which studies of mentoring in other contexts have suggested may be pivotal (Hobson et al. 2016; Kochan et al. 2015). This does not necessarily suggest that none of these features make or have the potential to make a positive contribution to effective teacher mentoring in the English FE sector: the current lack of evidence may be explained, at least in part, by some or all of these elements being insufficiently widespread in the sector, or insufficiently well executed where they exist, for any substantive impact to be observable. These matters comprise potentially valuable avenues for further research.

5.2. Towards an architectural superstructure for mentoring

In addition to offering a refinement, extension and reconceptualisation of Cunningham's (2007) institutional architecture for mentoring, our findings demonstrate that a supportive organisational architecture or mentoring substructure is a necessary but insufficient condition for optimising the effectiveness of teacher mentoring. The concept of an organisational architecture is necessarily limited because the wider context inevitably interacts with and impacts the organisational architecture and what goes on inside of it (including specific mentoring relationships). Our analyses suggest that the external considerations that influence the extent to which it is possible to establish a supportive organisational architecture or mentoring substructure include: 1) the resource provided to organisations to support mentoring and PLD; 2) the presence or absence of a wider (e.g. education sector specific, regional, national and/or international) support structure for mentoring; 3) the presence or absence of appropriate, research-informed mentoring policy directives; and 4) wider local, national, international and global education agendas and orthodoxies. To illustrate the third of these points, we noted earlier that much of the impetus for the expansion of teacher mentoring in the English FE sector came from Ofsted and the DfES (2004) report '*Equipping our teachers for the future*', which stated that "Mentoring, either by *line managers*, subject experts or experienced teachers in related curriculum areas, is essential" (para 3.6; emphasis added), yet our analyses suggest that mentoring tends to be more effective where mentees are

not paired with their line managers. Hence, in addition to providing an impetus for the expansion of mentoring provision, *Equipping our teachers for the future* may have inadvertently provided an impediment to its effectiveness, a situation that might be avoided in the future by taking greater account of research evidence.

We argue, then, that organisational mentoring architectures or mentoring substructures will be significantly enhanced where there exists a complementary and coherent mentoring superstructure. A supportive mentoring superstructure comprises features of the wider educational, social, economic, cultural, political and ideological context(s), across regional, state, national, international and global arenas, which together provide favourable conditions for the establishment and maintenance of effective mentoring substructures. It follows from our findings that such features would include: 1) sufficient funding for education sectors and organisations within them to support the development of effective mentoring substructures; 2) research-informed policy-making which helps to foster appropriate conditions for effective mentoring (e.g. through effective mentor training and development within organisations, education sectors and systems); and 3) more generally, a retreat from the performativity, accountability and surveillance cultures associated with GERM and neo-liberalism, which dominate the English and many (but not all) other educational systems, and which have been found to impede the development of relational trust and openness (Jeffrey 2002; Keddie, Mills, and Pendergast 2011; Lumby 2009), which are pivotal to the success of mentoring relationships (Hobson and McIntyre 2013).

In considering ways in which mentoring superstructures could be enhanced, we suggest that professional mentoring associations (PMAs) could play a crucial role in performing several key functions to support policy makers, organisations and mentoring relationships. Such functions include or might include, but are not restricted to: collating research-evidence for policy-makers to enhance decision-making, and lobbying policy-makers to try to ensure policy supports rather than impedes mentoring effectiveness; offering research-informed PLD opportunities for organisational mentoring coordinators and mentor trainers, and/or quality assuring or accrediting those provided by others; and establishing Mentoring Communities of Practice (MCoPs), which have been found to provide mutual support and solidarity amongst mentors, enhance the development of a mentor identity, and support the PLD of mentors more generally (Holland 2018). Current examples of some of the more prominent PMAs include the European Mentoring and Coaching Council (EMCC), the International Mentoring Association (IMA), and the Romanian Mentors Association ('Asociatia Mentorilor din Romania' – ASMERO). PMAs can be regional, national or international organisations, and can and do operate at varying levels of specificity and generality (e.g. they may support teachers in particular education sectors, or occupational mentoring more generally). Research might usefully interrogate which of these variants of PMAs contribute most positively to supportive mentoring superstructures, or the extent to which they all enhance the superstructures in different ways.

6. Conclusion

This paper has made an original and significant contribution to the mentoring literature by refining, extending and reconceptualising Cunningham's (2007) architecture for mentoring, by showing that a supportive organisational mentoring architecture, or mentoring substructure, is a necessary but insufficient condition for achieving optimally effective teacher mentoring, and by illustrating how mentoring substructures and therefore mentoring

relationships and effectiveness will be enhanced where there exists a complementary, supportive mentoring superstructure.

The features of supportive mentoring substructures and superstructures drawn out in our findings section provide evidence-informed guidance to organisational leadership teams and mentoring coordinators (in and potentially beyond the English FE sector) on how they might maximise the effectiveness of mentoring within their organisations, and to policy-makers and other stakeholders on how they might provide a favourable climate within which supportive mentoring substructures can be developed so that the potential benefits of teacher mentoring are more consistently realised.

The findings presented in this paper highlight the need for a new research agenda which transcends the study of mentoring in professional, occupational and contextual silos to: 1) explore the extent to which the features of supportive mentoring substructures and superstructures identified in the current study are applicable in different professional, occupational and international contexts; 2) identify additional features of supportive mentoring superstructures in different settings; and 3) establish whether or not contextual factors preclude the existence of universal mentoring substructures and superstructures.

Acknowledgements
We are grateful to Anna Stevens, Kerry Doyle and Angi Malderez for their valuable contributions to the original study, and to David Stephens, Linda Searby and the anonymous JET reviewers for their helpful comments on earlier versions of this paper.

References

1. Boyatzis, R. E., Smith, M. L. and Beveridge, A. J. 2013. "Coaching with Compassion: Inspiring health, well-being, and development in organizations." *The Journal of Applied Behavioral Science* 49 (2): 153-178.
2. British Educational Research Association (BERA). 2011. *Ethical guidelines for educational research*. London: British Educational Research Association.
3. Colley, H. 2002. "A 'rough guide' to the history of mentoring from a Marxist feminist perspective." *Journal of Education for Teaching* 28 (3): 257–273.
4. Cullimore, S. and Simmons, J. 2010. "The emerging dilemmas and challenges for mentors and mentees in the new context for training in-service teachers for the learning and skills sector." *Research in Post-Compulsory Education* 15 (2): 223-239.
5. Cunningham. B. 2007. "All the right features: towards an 'architecture' for mentoring trainee teachers in UK further education colleges." *Journal of Education for Teaching* 33 (1): 83-97.
6. Daly, C. and Milton, E. 2017. "External mentoring for new teachers: mentor learning for a change agenda." *International Journal of Mentoring and Coaching in Education* 6 (3): 178-195.
7. DfES. 2004. *Equipping our teachers for the future: Reforming initial teacher training for the learning and skills sector*. London: Department for Education and Skills. http://www.successforall.gov.uk/downloads/equippingourteachersforthefuture-115-161.pdf.

8. Duckworth, V. and Maxwell, B. 2015. "Extending the mentor role in initial teacher education: embracing social justice." *International Journal of Mentoring and Coaching in Education* 4 (1): 4–20.
9. Eliahoo, R. 2009. "Meeting the potential for mentoring in Initial Teacher Education: mentors' perspectives from the Lifelong Learning Sector." *Teaching in Lifelong Learning: A Journal to Inform and Improve Practice* 1 (2): 1-7.
10. Fisher, R. and Webb, K. 2006. "Subject specialist pedagogy and initial teacher training for the learning and skills sector in England: the context, a response and some critical issues." *Journal of Further and Higher Education* 30 (4): 337-349.
11. Fuller, A. and Unwin, L. 2003. "Learning as apprentices in the contemporary UK workplace: Creating and managing expansive and restrictive participation." *Journal of Education and Work*, 16 (4): 407–426.
12. Goodson, I. F. and Rudd, T. 2012 "Developing a Concept of 'Refraction': Exploring Educational Change and Oppositional Practice'." *Educational Practice and Theory* 34 (1): 5-24.
13. Hobson, A.J. 2017 "The Terrors of Judgementoring and the Case for ONSIDE Mentoring for Early Career Teachers." In *The SAGE Handbook of Mentoring*, edited by David A. Clutterbuck, Frances K. Kochan, Laura Lunsford, Nora Dominguez, and Julie Haddock-Millar, 335-357. Los Angeles: SAGE Publications.
14. Hobson, A.J., Castanheira, P., Doyle, K., Csigás, Z., and Clutterbuck, D. 2016. *The Mentoring across Professions (MaP) Project: What can teacher mentoring learn from international good practice in employee mentoring and coaching?* London: Gatsby Charitable Foundation. http://www.gatsby.org.uk/uploads/education/reports/pdf/mentoring-across-the-professions-final300816.pdf
15. Hobson, A.J., Maxwell, B., Stevens, A., Doyle, K., and Malderez, A. 2015. *Mentoring and coaching for teachers in the Further Education and Skills Sector in England*. London: Gatsby Charitable Foundation. http://www.gatsby.org.uk/uploads/education/reports/pdf/mentoring-full-report.pdf
16. Hobson, A.J. and Malderez, A. 2013. "Judgementoring and other threats to realizing the potential of school-based mentoring in teacher education." *International Journal of Mentoring and Coaching in Education* 2 (2), 89-108.
17. Hobson, A.J. and McIntyre, J. 2013. "Teacher fabrication as an impediment to professional learning and development: the external mentor antidote." *Oxford Review of Education* 39 (3), 345–365.
18. Holland, E. 2018. "Mentoring communities of practice: what's in it for the mentor?" *International Journal of Mentoring and Coaching in Education* 7 (2): 110-126.
19. Ingleby, E. 2014. "Developing Reflective Practice or Judging Teaching Performance? The Implications for Mentor Training." *Research in Post-Compulsory Education* 19 (1): 18–32.
20. Ingleby, E and Hunt, J. 2008. "The CPD needs of mentors in post compulsory Initial Teacher Training in England." *Journal of In-service Education* 34 (1): 61-74.
21. Jeffrey, B. 2002. "Performativity and primary teacher relations." *Journal of Education Policy* 17: 531–546.

22. Keddie, A., Mills, M., and Pendergast, D. 2011. "Fabricating an identity in neo-liberal times: Performing schooling as 'number one'." *Oxford Review of Education* 37: 75-92.
23. Kochan, F., Searby, L., George, M. P., and Edge, J. M. 2015. "Cultural influences in mentoring endeavors: Applying the Cultural Framework Analysis Process." *International Journal of Mentoring and Coaching in Education* 4 (2): 86–106.
24. Lawy, R. and Tedder, M. 2011. "Mentoring and individual learning plans: issues of practice in a period of transition." *Research in Post-Compulsory Education* 16 (3): 385-396.
25. Lingfield, R. 2012. *Professionalism in further education: Final report of the Independent Review Panel.* London: Department for Business, Innovations and Skills. www.gov.uk/government/uploads/system/uploads/attachment_data/file/34641/12-1198-professionalism-in-further-education-final.pdf
26. Lucas, N. 2007. "Rethinking initial teacher education for further education teachers: from a standards to a knowledge-based approach." *Teaching Education* 18 (2): 93-106.
27. Lumby, J. 2009. "Performativity and identity: mechanisms of exclusion. *Journal of Education Policy* 24: 353-369.
28. Malderez, A. 2015. "On mentoring in supporting (English) teacher learning: where are we now?" In *Inspirations in Foreign Language Teaching: Studies in Language Pedagogy and Applied Linguistics in Honour of Peter Medgyes,* edited by D. Hollo and K. Karolyi. Harlow: Pearson.
29. Mitchell, H. J. 1999. "Group Mentoring: does it work?" *Mentoring and Tutoring: Partnership in Learning* 7 (2): 113-120.
30. Norris E and Adam R (2017) *All Change: Why Britain is so prone to policy reinvention and what can be done about it*. London: Institute for Government. www.instituteforgovernment.org.uk/publications/all-change
31. Ofsted. 2003. *The initial training of further education teachers: A survey HMI 17*. London: Ofsted. http://ofsted.gov.uk/publications.
32. Ofsted. 2004. *Framework for the inspection of initial teacher training of further education teachers HMI 2274*. London: Ofsted. http://www.ofsted.gov.uk/publications
33. Orr, K. 2012. "The end of 'strategic compliance'? The impact of performativity on teachers in the English further education sector". In *Performativity and education: Ethnographic cases of its effects, agency and reconstructions* edited by B. Jeffrey and G. Troman, 199-216. Stroud, E and E Publishing.
34. O'Leary, M. and Rami, J. (2017) "The impact of austerity in Further Education: Cross-cultural perspectives from England and Ireland." In *International and Comparative Education,* edited by B. Bartram, 74-86. Abingdon: Routledge.
35. Rea, L. M., and Parker, R. A. 1992. *Designing and conducting survey research*. San Francisco: Jossey-Boss.
36. Sahlberg, P. 2010. "Rethinking accountability in a knowledge society." *Journal of Educational Change* 11: 45-61.
37. Searby, L. 2014 "The Protégé mentoring mindset: a framework for consideration." *International Journal of Mentoring and Coaching in Education* 3 (3): 255-276.

38. Searby, L.S. and Brondyk, S.K. 2016. *Best Practices in Mentoring for Teacher and Leader Development*. Charlotte, NC: Information Age Publishing.
39. Smith, R, and O'Leary, M. 2013. "New Public Management in an age of austerity; knowledge and experience in further education." *Journal of Educational Administration and History* 45 (3), 244-266.
40. Tashakkori, A., and Teddlie, C. 1998. *Mixed methodology: Combining qualitative and quantitative approaches.* Thousand Oaks, CA, Sage.
41. Tedder, M. and Lawy, R. 2009. "The pursuit of 'excellence': mentoring in further education initial teacher training in England." *Journal of Vocational Education & Training* 61 (4): 413-429.
42. Thomas, D. 2006. "A General Inductive Approach for Analyzing Qualitative Evaluation Data." *American Journal of Evaluation* 27 (2): 237-246.
43. Thompson, C. 2016. "The magic of mentoring: a democratic approach to mentoring trainee teachers in post-compulsory education." *Research in Post-Compulsory Education* 21 (3), 246-259.
44. Tong, C. and Kram, K. E. 2013. "The efficacy of mentoring: The benefits for mentees, mentors, and organizations." In *The Wiley-Blackwell handbook of the psychology of coaching and mentoring*, edited by J. Passmore, D. B. Peterson, and T. Freire. Oxford: Wiley-Blackwell.